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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,925	09/10/2003	Basil Karanikos		3129

7590 10/17/2005
Wolf Greenfield
600 Atlantic Avenue
Boston, MA 02110

EXAMINER

KIM, YOON YOUNG

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/658,925	KARANIKOS ET AL.	
	Examiner	Art Unit	
	Yoon-Young Kim	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1204, 1203</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Lesser, U.S. Patent No. 6,007,853.

Regarding Claim 12, Lesser discloses a beverage filter cartridge (Fig. 4, #10) comprising: a cup-shaped outer container (#20) having a side wall and a bottom; and a cup-shaped filter element (#14) having a side wall and a bottom; the filter element being arranged to subdivide the interior of the container into a first chamber inside the filter element and a second chamber located between the bottom of the filter element and the bottom of the container, the filter element having an upper rim (Fig. 9) joined to the container side wall at a peripheral juncture, and the filter side-wall having exterior channels that face the container side wall and that lead downwardly from the peripheral juncture to the second chamber (Fig. 7).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3, and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lesser in view of Sweeney et al., U.S. Patent No. 6,645,537 B2.

Regarding Claim 1, Lesser discloses a beverage filter cartridge (Fig. 4, #10) comprising: an impermeable cup-shaped container (#20) having a substantially flat first bottom and a first side wall diverging upwardly from the first bottom to a collar (#22) surrounding a top opening; a filter element (#14) having a substantially flat second bottom and a second side wall diverging upwardly from the second bottom to an upper rim, the filter element being received in the container with the second bottom spaced both inwardly from the first side wall and vertically from the first bottom, and with the upper rim joined at a peripheral juncture to the interior of the first side wall (Fig. 9), the interior of the container thus being subdivided by the filter element into a first chamber accessible via the top opening, and a second chamber disposed between the first and second bottoms, the second side wall coacting with the interior of the first side wall to define exit channels leading from the peripheral juncture to the second chamber (Col. 7, Lines 18-21); a beverage medium received in the first chamber via the top opening (Col. 6, Lines 27-30); and an impermeable cover sealed to the collar and closing the top opening (Col. 7, Lines 3-6), the filter element being permeable to accommodate the flow therethrough of the beverage

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for delivery via the channels to the second chamber (Col. 7, Lines 10-21). However, Lesser does not disclose a piercable cover and bottom. Sweeney teaches a beverage filter cartridge comprising a cover and bottom being piercable (Fig. 3, #28 30). It would have been obvious to one of ordinary skill in the art to modify Lesser with the element of Sweeney in order to admit heated liquid into the first chamber to combine with the beverage medium and exit through the second chamber (Col. 4, Lines 35-43).

Regarding Claim 2, Lesser discloses that the first and second bottoms are substantially parallel (Fig. 4).

Regarding Claim 3, Lesser discloses that the channels are defined by flutes in the second side wall (Fig. 7).

Regarding Claims 5-6, Lesser in view of Sweeney does not disclose the angle between the first and second side walls. One of skill in the art would by routine experimentation find the optimum angle. It would have been obvious to one of skill in the art to make the angle of Lesser in view of Sweeney as so desired or required to optimize filtration.

Regarding Claim 7, Lesser discloses that the height of the first chamber measured between the second bottom and the cover is between about 75 to 80% of the height of the interior of the cartridge as measured between the first bottom and the cover (Fig. 4).

Regarding Claim 8, Lesser discloses that the channels increase in width from a minimum adjacent the peripheral juncture to a maximum at the second chamber (Fig. 7).

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lesser in views of Sweeney as applied to Claim 1 above, and further in view of Tanner et al., U.S. Patent No. 6,602,410 B1.

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Regarding Claim 4, Lesser in view of Sweeney does not disclose pleats. Tanner teaches a filter cartridge comprising pleated side walls (Col. 11, Lines 1-2). It would have been obvious to one of ordinary skill in the art to modify Lesser in the of Sweeney with the element of Tanner in order to increase the flow rate by creating channels (Col. 11, Lines 2-4).

6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lesser in view of Sweeney as applied to Claim 1 above, and further in view of Daswick, U.S. Patent No. 3,971,305.

Regarding Claim 9-11, Lesser in view of Sweeney does not disclose lower permeability and increased thickness in the lower region of the filter element. Daswick teaches a beverage filter cartridge wherein reduced permeability is achieved by increasing the thickness by lining the lower region of the filter element with an insert (Fig. 2, #28) of like filter material. It would have been obvious to one of ordinary skill in the art to modify Lesser in view of Sweeney with the element of Daswick in order to retain the beverage media within the filter (Col. 3, Lines 11-15).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK

10/06/05



TERRY K. CECIL
PRIMARY EXAMINER